Job rotation to prevent work-related musculoskeletal complaints: usefulness and ease of use

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1. Introduction
There is growing interest for the potential for intervention strategies to prevent musculoskeletal complaints and promote sustainable working life in high demanding jobs. Job rotation is a commonly advocated and used organizational measure for preventing work-related musculoskeletal complaints through changes in physical work exposures (Leider et al. 2015). Little is known about possible facilitators and barriers to usefulness and ease of use of job rotation to optimize physical work exposures in high demanding jobs. The objective of this study is to identify facilitators and barriers to usefulness and ease of use of job rotation to prevent work-related musculoskeletal complaints among workers and employers in the construction industry.

2. Method
Following a qualitative research design, semi-structured interviews with employers and workers from the construction industry were conducted. Interview participants were recruited from different construction organizations using a purposive sampling procedure with variation in organization size and jobs, but with opportunities for rotation between tasks and/or activities and high prevalence of musculoskeletal complaints. The interview questions covered the following topics: (i) facilitators and barriers in the organizational and individual context to usefulness of job rotation to optimize physical work exposures, prevent musculoskeletal complaints and promote sustainable working life, and (ii) facilitators and barriers in the organizational and individual context to ease of use of job rotation in the construction industry.

3. Results
Twelve employers were interviewed from five carpentry, five paving and two painting companies. Eleven workers were interviewed; four carpenters, four pavers and three painters. A facilitative organizational climate, job autonomy, favourable job characteristics, and flexible work processes were seen as facilitators in the organizational context. Favourable worker characteristics, facilitative worker behaviour and supportive attitude were seen as facilitators in the individual context. An impeding organizational climate, unfavourable job characteristics, and inflexible work processes were seen as barriers in the organizational context. Unfavourable worker characteristics, impeding work behaviour and unsupportive attitude were seen as barriers in the individual context.

4. Discussion
Seven themes influencing both usefulness and ease of use of job rotation in the construction industry were mentioned. Identifying barriers to usefulness and ease of use in relevant stakeholder groups is necessary. Consequently, strategies can be selected or developed to overcome these barriers or to reject job rotation as a useful or easy to use intervention in the given context.

References